REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 4-8, 14-19, and 23-27 are pending. In the present amendment, Claims 4, 5, 14, and 19 have been amended. The amendments overcome the rejection under 35 U.S.C. § 112. No new matter has been added.

The Official Action indicates that all the claims would be allowable if amended to overcome the rejections under 35 U.S.C. § 112 and 35 U.S.C. § 101.

By way of summary, Claims 4-8, 14-19, and 23-27 were rejected under 35 U.S.C. § 112, second paragraph as being incomplete. On page 4 of the Official Action, it is stated that:

> Applicant appears to have invoked 35 U.S.C. 112, 6th paragraph with respect to Claims 5-8, 14-19, and 22-27; however, it does not appear that the specification identifies any structure which corresponds to the recited means. Clarification by Applicant is requested as to whether 35 U.S.C. § 112, 6th paragraph was meant to be invoked; and if so, where in the specification the requisite structure for the recited means are disclosed.

In addition, Claims 4-8, 14-19, and 23-27 were rejected under 35 U.S.C. § 101 as lacking utility and as being directed to non-statutory subject matter (a mathematical algorithm per se) rather than a practical application of an abstract idea or mathematical algorithm.

At the outset, Applicant would like to thank the Examiner for the indication of allowable subject matter with respect to all of the claims upon correction of the rejections under 35 U.S.C. § 112 and 35 U.S.C. § 101.

Turning first to the rejection of the claims under 35 U.S.C. § 112, second paragraph, Applicant notes that Claim 4 already recites detecting an embedded code which is embedded

in a predetermined content. Thus, it is already clear that the predetermined content contains the embedded code. In any event, to overcome this rejection, independent Claims 4 and Claim 5 have been amended to recite "receiving said predetermined content which contains the embedded code therein from an external device." In addition, Claims 4, 5, 14, and 19 have been amended to add "detecting [or detecting means for detecting] said embedded code contained within said predetermined content." Basis for this language can be found from the detector unit in Applicant's Fig. 6b.

In addition, on page 3 of the Official Action its asserted that it is not clear that the user identification being calculated in the claims is in fact part of the claimed embedded code. In response, Applicant notes that claim 5 recites dividing the embedded code into component codes, decoding each of the component codes to obtain a plurality of residue pairs, and calculating the identification number from the plurality of residue pairs. Accordingly, it is clear that the user identification number of colluder is determined from the embedded code.

In response to the inquiry at page 4 of the Official Action in regard to whether Applicant has invoked 35 U.S.C. § 112 6th paragraph, Claims 5-8, 14-19, and 22-27 have been amended to delete all means plus function language. Therefore, the parent amendment clarifies that the amended claims do not invoke the 6th paragraph of § 112. Therefore, Applicant requests that the rejection of Claims 4-8, 14-19, and 23-27 under 35 U.S.C. § 112 be withdrawn.

Turning next to the rejection of the claims under 35 U.S.C. § 101, the Official Action asserts on page 4 that the claims lack substantially utility and are drawn to an algorithm *per se*, rather than a practical application of an abstract idea or mathematical algorithm. The Official Action (page 5) acknowledges that each element in the claims is disclosed in the specification as a section, but that it is unclear as to what a section is. In response, Applicant notes that the black box representation of sections would have been understood by an artisan.

In addition, the claims are drawn to either a method or a unit for calculating a user

identification number of a colluder who has made a collusion attack, by detecting an

embedded code within a predetermined content. Each of the independent claims recite *inter*

alia receiving predetermined content which contains the embedded code therein from an

external device. Software *per se* does not receive anything from an external device.

Accordingly, the claim is not limited to software *per se*.

In addition, claim 4 recites a receiving step, a detecting step, dividing the embedded

code, decoding the components to obtain a plurality of residue pairs, calculating a user

identification number of a colluder who made a collusion attack on a content. The

calculation of the identification of a colluder, whereby the colluder may be identified, is a

practical application of the invention. The outputted calculated colluder identification

number is a useful, tangible and concrete result. Therefore, it is respectfully submitted that

the claims define statutory subject matter under 35 U.S.C. § 101, as per *AT&T Corp. v. Excel*

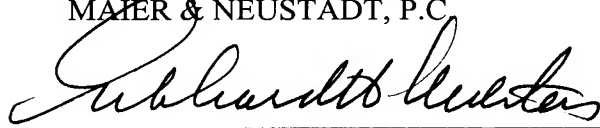*Communications, Inc.*, 50 USPQ2d 1447, 1449, (Fed. Cir. 1999).

From all of the above, Applicant maintains that the claims are statutory within the

meaning of 35 U.S.C. § 101.

In any event, to advance the prosecution of the application, Applicant has amended

each of the independent claims to recite a method or unit of calculating the user identification

number of a colluder by detecting an embedded code which is embedded in a predetermined

content. Accordingly, for this additional reason, Applicant believes that the claims are

statutory under § 101 and that the rejection of the claims as being non-statutory should be

withdrawn.

Applicant believes the application is now in condition for allowance and early

indication in that regard is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Eckhard H. Kuesters
Registration No. 28,870

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)